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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,863	06/26/2003	Bong-Hwoan Choi	1293.1758	1435
21171 7590 08/20/2007 STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER LAMB, CHRISTOPHER RAY	
			ART UNIT	PAPER NUMBER
			2627	
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			08/20/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/603,863	<b>Applicant(s)</b> CHOI, BONG-HWOAN	
	<b>Examiner</b> Christopher R. Lamb	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 5-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1 and 5-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 1:

The subject matter that was not described in the specification is "if the measured focus error is **above** a constant value, detecting the optical disc as a fashion disc type having diameters of 8 cm."

In the specification, if the focus error is **above** a constant value, the optical disc is detected as a 12 cm disc. If the focus error is **below** the value, it is detected as an 8 cm disc. The claim is opposite the specification.

See, for example, Fig. 3: in step 312, the apparatus asks if the focus error is greater than the value. If the answer is no, it moves to step 313, determining it as a fashion disc. Therefore if the focus error is below the value, it detects it as a fashion disc type having diameters of 8 cm.

See also paragraphs 36 and 37 of the specification.

Since the claim is now the reverse of the specification as originally filed, one skilled in the art would not conclude that the inventor had possession of the claimed invention at the time the invention was filed.

Regarding claims 5-10:

They are dependent on claim 1.

3. Claims 1 and 5-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 1:

As noted in the previous rejection, the claim contains subject matter that contradicts the specification.

The claim recites "moving the pickup to a periphery area and measuring the focus error; and if the measured focus error is above a constant value, detecting the optical disc as a fashion disc type having diameters of 8 cm."

The purpose of measuring the focus error is to determine if there is a disc below the pickup. Since the claim requires the pickup to have moved to a periphery area, the purpose of this test is to distinguish between 12 cm and 8 cm discs. If it is a 12 cm disc, there is a disc below the pickup, and if it is an 8 cm disc, there is no disc below the pickup.

If there is a disc below the pickup, the focus error is high. If there is no disc, the focus error is low.

However, the claim requires that if the focus error is above a constant value, detecting the disc as an 8 cm disc. This doesn't make sense. If the focus error is above the value, there is a disc below the pickup, and therefore the disc cannot be an 8 cm disc.

Thus one skilled in the art would be unable to make and/or use an invention that detects the optical disc as an 8 cm disc when the focus error in the periphery is above a constant value.

Regarding claims 5-10:

They are dependent on claim 1.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1 and 5-10 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

This rejection has been repeated from the previous office action.

Regarding claim 1:

The claim reads "if the measured focus error is above a constant value, detecting the optical disc as a fashion disc type having diameters of 8 cm."

This is opposite the disclosure. In the specification, if the measured focus error is **above** a constant value, the optical disc is detected as a 12 cm disc. If the measured

focus error is **below** the constant value, it is detected as a fashion disc. See paragraphs 36-37 of the specification.

Therefore this claim is rejected as not distinctly claiming the subject matter which applicant regards as the invention: the claim is opposite the invention.

Regarding claims 5-10:

They are dependent on claim 1.

### ***Response to Arguments***

6. Applicant's arguments filed June 5<sup>th</sup>, 2007, regarding claims 1 and 5-10 have been fully considered.

With regards to the 35 U.S.C. 112, first paragraph, rejections directed toward the "non-circular shape," Applicant's arguments are persuasive: since Applicant has amended to remove the recitation of detecting a "non-circular shape" from the claims, the previous rejections have been withdrawn. However, the claims are now being rejected under 35 U.S.C. 112, first paragraph for new reasons, as discussed above.

With regards to the 35 U.S.C. 112, second paragraph, rejection. There were two rejections: one related to the "non-circular shape," which has been withdrawn, and one related to detecting the fashion disc if the measured focus error is above the value.

With regards to that second rejection, Applicant's arguments are not persuasive. Applicant argues that the subject matter is disclosed in paragraph 22 of the specification, and that paragraphs 36-37 relate to operations not claimed.

This does not appear to be true. Paragraph 22 does not disclose the claimed subject matter. Paragraphs 36 and 37 directly describe the claimed subject matter.

Paragraph 22 is a description of Figure 3. In it, it describes “detecting a focus error (FE) signal while moving a focus lens up and down (OPERATION 310), storing a peak-to-peak value X of the FE signal (OPERATION 311), determining whether the value X is above a reference value (OPERATION 312), determining the type of the optical disc as an 8 cm fashion disc (OPERATION 313).”

Although the paragraph describes both determining whether the focus error is above a reference value and determining the type of disc as an 8 cm disc, it does not actually state that it determines it as an 8 cm disc if the value is above the reference value.

Looking at the figure that paragraph 22 refers to, it is clear that the apparatus determines the disc as an 8 cm disc when the focus error is below the reference value. This is shown by the “NO” legend between steps 312 and 313.

Additionally, it is overwhelming clear that paragraphs 36 and 37 describe the same subject matter as paragraph 22, except in more detail. See, for example, paragraph 37: “However, if the peak-to-peak value X of the FE signal is smaller than the reference value, the disc detection unit 205-2 determines-that the optical disc 200 is an 8 cm fashion disc (OPERATION 313).”

Operation 313 is the exact same step number referenced in paragraph 22: thus the two paragraphs are definitely describing the same operation. In that paragraph it clearly states that the disc is detected as an 8 cm disc when the focus value is smaller than the reference. This is opposite the claim.

Therefore Applicant's argument is not persuasive, and the 35 U.S.C. 112, second paragraph, rejection has been maintained. Furthermore, since Applicant's amendment now has Applicant detecting an 8 cm disc after a high focus error signal, several 35 U.S.C. 112, first paragraph rejections have been made as discussed above.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Lamb whose telephone number is (571) 272-5264. The examiner can normally be reached on 9:00 AM to 6:30 PM Monday to Friday.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CRL 8/9/07

/William R. Korzuch/  
SPE, Art Unit 2627